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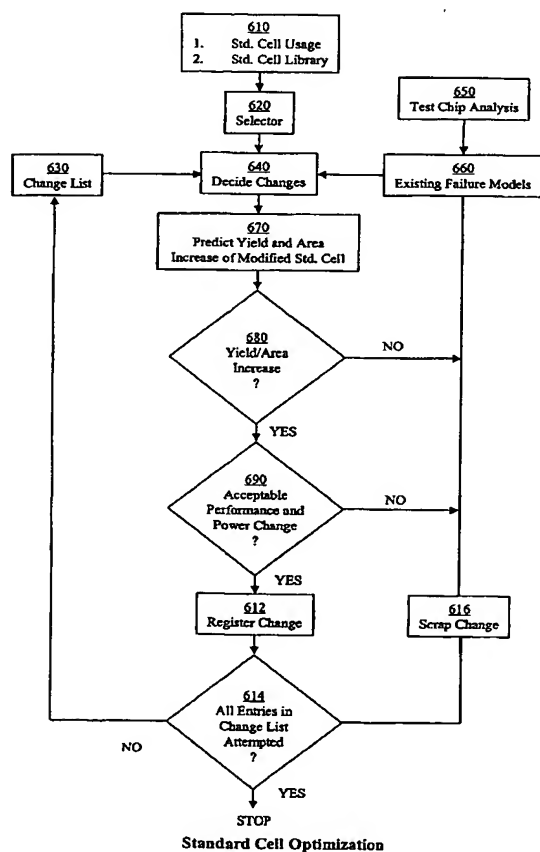
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[Continued on next page]

(54) Title: **YIELD IMPROVEMENT**



(57) Abstract: An integrated circuit is designed to improve yield when manufacturing the integrated circuit, by obtaining a design element from a set of design elements used in designing integrated circuits (610). A variant design element is created based on the obtained design element, where a feature of the obtained design element is modified to create the variant design element (670). A yield to area ratio for the variant design element is determined (680). If the yield to area ratio of the variant design element is greater than a yield to area ratio of the obtained design element, the variant design element is retained to be used in designing the integrated circuit (612).



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A. CLASSIFICATION OF SUBJECT MATTER

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US CL : 716/2, 4, 5

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

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U.S. : 716/2, 4, 5

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,946,214 A (HEAVLIN et al.) 31 August 1999 (31.08.1999), column 2, lines 13-55; column 3 line 5 to column 8, line 38; Figs. 1-6.	1-14, 16-22, 26, 34-36, 37-47, 49-53, 57, 65-67
A, P	US 2003/0004679 A1 (TRYON, III et al.) 02 January 2003 (02.01.2003), entire document	1-67
A, P	US 2003/0080960 A1 (CHANG) 01 May 2003 (01.05.2003), entire document.	1-67



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document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

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INTERNATIONAL SEARCH REPORT

PCT/US03/37046

Continuation of B. FIELDS SEARCHED Item 3:

EAST, IEEE

search terms: yield, improv\$, ratio, area, change, manufacturing, failure, redundancy, memory